

REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present application is respectfully requested. Claims 1-21 are pending in the above application, of which, claim 1 is independent.

The Office Action dated February 3, 2010, has been received and carefully reviewed. In that Office Action, claims 1-21 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In addition, claims 1-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki in view of a machine translation of JP 2002-295991 (hereinafter, "Ozawa"), claims 1-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki in view of CN 1305086 (hereinafter "Tetsu") based on a machine translation of a Japanese counterpart thereof, and claims 20 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki and Tetsu and further in view of Evans. Objections to the specification were also raised. It is believed that all claims patentably distinguish over the art of record, and reconsideration and allowance of all claims is respectfully requested in view of the above amendments and the following remarks.

REJECTIONS UNDER 35 U.S.C. 112, SECOND PARAGRAPH

By the above amendment, the phrases "directly exposed" and "indirectly exposed" have been removed from claim 1 and replaced with a description of a fluid flow entering the first diffuser space. This flow is designated a "direct flow" when it enters the first diffusor space before it is diverted by any structure in the apparatus and an indirect flow after it has been diverted by some structure. Support for this amendment can be found,

for example, in the paragraph beginning at page 15, line 30. This paragraph describes a flow of fluid from connection piece 6 that enters a first diffuser space. Some of the flow enters the delimiting elements 1, and some of the flow impinges against separating elements 3 before entering the delimiting elements 1. From the delimiting elements, the flow enters a second diffuser space and then exits the apparatus through connection flange 7. The flow is disclosed, and the above amendment merely names two existing parts of the flow so that the invention may be more precisely described. It is therefore submitted that this amendment is fully supported by the original disclosure and does not constitute new matter. Wherefore, the withdrawal of the rejection of claims 1-21 under 35 U.S.C. 112, second paragraph, is respectfully requested.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki in view of Ozawa. Claim 1 as amended, recites an apparatus for exchanging heat having a number of structural elements and cohesive joins between various ones of the elements. The apparatus includes at least one first diffuser space that is flow-connected to at least one first connection piece through which a flow of a first fluid enters the first diffuser space. The flow is a direct flow when it enters the first diffuser space before it is diverted by a structure in the apparatus for exchanging heat and an indirect flow after it is diverted by some structure in the apparatus for exchanging heat. Claim 1 also recites that connections in which the material forming the cohesive join is contacted by the direct flow comprise a first connecting material and that connections in which the material which forms the cohesive join is contacted by said indirect flow and

not contacted by said direct flow comprise a second connecting material, and that the compositions of the first and second connecting materials are different than one another.

Shibagaki shows an exhaust gas heat exchanger with two flow paths, but does not show the use of different cohesive joins as claimed. Ozawa teaches the use of one solder for connections that contact a first heat transfer medium and another solder for connections that contact a second heat transfer medium in a different part of the heat exchanger. However, the combination of Shibagaki and Ozawa does not suggest the use of different materials for joins that are contacted by different portions of a flow of the same heat transfer medium as claimed. Claim 1 as amended is submitted to be allowable over Shibagaki and Ozawa for at least this reason.

Claims 2-21 depend from Ozawa and are submitted to be allowable for at least the same reasons as claim 1.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki in view of Tetsu. However, Tetsu is also directed to the use of different connecting materials for joins that are exposed to different fluids in different parts of a heat exchanger. Tetsu does not suggest that different materials should be used to form joins that are exposed to different portions of a flow of a single fluid as recited in claim 1. Claim 1 is submitted to be allowable over Shibagaki in view of Tetsu for at least this reason.

Claims 2-21 depend from claim 1 and are submitted to be allowable for at least the same reasons as claim 1.

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Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibagaki in view of Tetsu and further in view of Evans. Claims 20 and 21 depend from claim 1. Evans does not address the shortcomings of Shibagaki and Tetsu discussed above in connection with claim 1. Claims 20 and 21 are therefore submitted to be allowable for at least the same reasons as claim 1.

CONCLUSION

Each issue raised in the Office Action dated February 3, 2010, has been addressed, and it is believed that claims 1-21 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited. If the examiner believes that any additional changes would place the application in better condition for allowance, the examiner is invited to contact the undersigned attorney at the telephone number listed below.

Deposit Account Authorization

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-3828 and please credit any excess fees to such deposit account.

Respectfully submitted,



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Date: July 26, 2010